

NEW RECORDS OF ARCTIC SPECIES IN SOUTHEASTERN NEW BRUNSWICK

Three arctic species with southern mainland limits in the mountains of the Gaspé Peninsula, according to Fernald (1950), are *Dryas integrifolia* Vahl., *Salix myrtillifolia* Anderss. and *Solidago multiradiata* Ait. The last named has been reported from St. Paul Island, Nova Scotia, by Perry in 1931.

These three species were found in the vicinity of Hillsborough, Albert County, in south-eastern New Brunswick during 1964 associated with *Anemone parviflora* Michx., *Shepherdia canadensis* (L.) Nutt., and *Potentilla fruticosa* L., new records for this part of the province, and with *Erigeron hyssopifolius* Michx., *Galium triflorum* Michx., *Mitella nuda* L., *Campanula rotundifolia* L., and *Cystopteris bulbifera* (L.) Bernh., all common elsewhere in Albert County.

The habitat is a crumbling cliff of white gypsum, less than half a mile long, 70-80 ft. high, with a north-facing slope of 70-75°. The plateau at the top of the cliff is 300 ft. above sea level and bounded on at least three sides by the steep gypsum cliffs. It is dissected slightly by streams and honey-combed with funnel-shaped sinkholes ranging from 10 to 60 feet in depth and in orifice diameter. The plateau, which has been partially cut over, supports a somewhat stunted forest of *Picea rubens* Sarg., *P. mariana* (Mill.) BSP., *Abies balsamea* (L.) Mill., *Betula lutea*, Michx.f. and *Tsuga canadensis*, (L.) Carr.; there is generally a heavy carpet of herbs, mosses and lichens beneath. Along the streams, for the most part, the same species are present but the forest growth is richer, particularly at the base of the cliffs. None of the newly recorded species are present in the forest although *Salix myrtillifolia* is abundant near the base of the north-facing cliff at the upper edge of the forest. Some of the other species do appear wherever gypsum occurs at the surface and the canopy is open. *Dryas integrifolia*, *Solidago multiradiata* and *Anemone parviflora* appear to be confined to the exposed north-facing cliff, forming, with the other

species, mats of up to two square meters in area on the otherwise loose talus.

Other gypsum cliffs in Albert County investigated thus far do not support *Dryas integrifolia*, *Solidago multiradiata*, *Anemone parviflora* or *Salix myrtillifolia* although all of the other species are usually present.

The nomenclature employed here follows Fernald (1950). Specimens have been deposited in the Herbarium of the University of New Brunswick, Fredericton, New Brunswick and in the Phanerogamic Herbarium of the Canada Department of Agriculture, Ottawa.

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LITERATURE CITED

- FERNALD, M. L. 1950. Gray's Manual of Botany. 8th ed., American Book Co., N. Y.
PERRY, L. M. 1931. Vascular Flora at St. Paul Island, Nova Scotia. *Rhodora* 33: 105-126.

COMMON TREES OF PUERTO RICO AND THE VIRGIN ISLANDS¹

Visitors to the West Indies interested in trees usually come away with much misinformation acquired from chauffeurs and local guides. Even the best "official guides" in the

¹Common Trees of Puerto Rico and the Virgin Islands. By Elbert L. Little, Jr., and Frank H. Wadsworth. U. S. Department of Agriculture, Agriculture Handbook No. 249, 548 pages, illus. 1964. For sale by the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402. Price \$4.25 (cloth).